

METHODS AND SYSTEMS FOR PROCESSING MICROFLUIDIC SAMPLES OF  
PARTICLE CONTAINING FLUIDS

ABSTRACT

The present invention relates to a microfluidic system for processing a cell-  
5 containing liquid. The system includes a microfabricated substrate having an enrichment  
channel to prepare an enriched cell sample from the cell-containing liquid. A flow through  
member is in liquid communication with the enrichment zone. The flow through member  
substantially prevents cells of the cell-containing fluid from exiting the enrichment zone  
while allowing liquid of the cell-containing liquid to exit the enrichment zone. A gas actuator  
10 associated with the enrichment zone provides a gas pressure sufficient to move the enriched  
cell sample from the enrichment zone.

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